IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Rodney S. Daughtrey	Art Unit	: 2179
Serial No.	: 10/697,823	Examiner	: Tran, Mylinh T
Filed	: October 30, 2003	Conf. No.	: 9540
Title	: GRAPHICAL USER INTERFACE FOR TRAVEL PLANNING SYSTEM		

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Pursuant to 37 C.F.R. §41.41, Applicant responds to the Examiner's Answer as follows:

The examiner offers a characterization of what the examiner considers is disclosed by the de Marcken reference. This characterization is in prefatory remarks in answer to Appellant's arguments for specific claim groupings, as set out in Appellant's Appeal Brief. However, the examiner does not offer any citation to any passage in de Marcken for any feature mentioned in this characterization. Indeed, much of what the examiner states in this characterization, deals with the query window, which may be present in a system that uses the claimed invention, is nonetheless immaterial to the subject matter of Appellant's claimed invention.[1]

In discussing de Marcken, the examiner states that: "The graphical user interface includes icons associated with origins and destinations of itineraries that are represented in the graphical representation. The graphical user interface displays a total fare associated with a corresponding itinerary in the graphical representation." Appellant takes the "icons" to correspond to the bars in the bar graph of e.g., FIG. 22 and the prices after each bar in de Marcken.

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[1] The examiner states that de Marcken discloses:

A graphical user interface for a travel planning system comprises a graphical region of the graphical user interface that displays a graphical representation of the itinerary information associated with an executed user query. The graphical user interface includes a user query section comprised of a plurality of controls that can be used to specify information in a user query and a field having icons representing carriers such as airlines that are associated with itineraries in the graphical representation.

Apparently this description is directed to either FIG. 20 or the upper portions of FIGS. 22, 24, 26 or 27. However, those portions show a form for entry of a travel planning query having no relevance to the claimed invention.

In a further characterization of de Marcken, the examiner states that: "The graphical user interface representation include a histogram or a horizontal bar graph."[2]

The examiner also characterizes de Marcken as: "The graphical user interface can display the region in a separate window."[3]

The examiner concludes the characterization of de Marcken by an immaterial discussion that returns to the user query. The examiner again admits that de Marcken discloses that: "... a active graphic region that displays a graph representation of a metric of the itinerary information associated with an executed user query with the graph representation."[4]

The examiner also characterizes the Ran reference. However, in as much that the examiner only relies upon Ran for teaching web-pages, Appellant believes that it is unnecessary to discuss the examiner's characterization of Ran.

The examiner characterizes Appellant's Invention. Appellant contends that the claims do not need any characterization. Also, the examiner characterizes Appellant's arguments in the brief. Appellant stands by the arguments presented in the brief and not the examiner's characterization of those arguments.

Claims 1, 6, 32, 33 and 35-39

In addressing Appellant's arguments, the examiner cites to de Marcken et al., e.g., at column 58, lines 34-51, where de Marcken clearly describes the window 370, as depicting a bar graph where individual flight segments, layovers, etc. in each bar of the bar graph are

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[2] Examiner's Answer bottom of page 11.
    "The graphical user interface has at least one control that selectively prunes from the graphical representation itineraries that do not correspond to a value associated with the at least one control. The one control include (sic) a nonstop control, direct control, same airline control, the airline icons, airport icons, a first class arrangement control, second class arrangement control or refundable ticket control."

[3] Apparently the examiner is referring to the itinerary region. Because immediately preceding that statement the examiner states:
    The graphical user interface has an itinerary region that displays a selected itinerary including information pertaining to segments of the itinerary. The region that displays a selected itinerary is presented by selecting one of the itineraries in the graphical region that displays itineraries.

[4] Id. page 12.

represented by bar segments. de Marcken also clearly discloses that: "The bar graph representation displays a metric of the pricing solution in a graph format."[5]

The examiner then makes the totally unsupported conclusion that: "DeMarcken et al. teach a tabular region having a plurality of cells at figure 22. 'Tabular' is defined as 'having a flat surface' based on the Collegiate Dictionary."

The examiner completely and improperly ignores that "tabular" also has another definition or meaning namely, "of or arranged in a table or tabulated scheme b) computed from or calculated by such a table or tables."[6] This later definition is clearly directed to how that word is used in Appellant's specification and claims and would be understood by one skilled in the art. In contrast, the definition relied on by the examiner, when applied to Appellant's claims, would be viewed as irrelevant to the claimed subject matter by one skilled in the art.

Either definition, however, does not help the examiner. The definition relied on by the examiner would not invoke a graphical user interface, in the mind of one skilled in the art whether of the type claimed by Appellant or the type described in de Marcken. Rather, the definition used by the examiner invokes a piece of furniture, e.g., a table having a flat surface. The definition quoted by Appellant, in contrast, clearly invokes "tabular" as a software and computer type construct.

As the Board will observe, the examiner deliberately fails to give any feature of the claim any patentable weight or consideration by the examiner.[7]

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[5] de Marcken col. 58, lines 46-48.

[6] See http://www.m-w.com/dictionary/tabular (enclosed in an accompanying Information Disclosure Statement).

[7] The examiner has not specifically stated that she is ignoring claim limitations nor has she explicitly stated that she is failing to accord claim elements patentable weight. Examination Guidelines for Computer-Related Inventions discusses non-functional descriptive material where certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer. Such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Such "descriptive material" is not a process, machine, manufacture or composition of matter.

The claims in the instant application are not directed to non functional descriptive material per se and therefore all elements of the claims are entitled to patentable weight. Claim 32 is directed to a computer program product residing a computer readable medium for rendering a graphical user. Among the features of claim 32 is that ... the cells are controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell ... .

The examiner also argues that de Marcken has a tabular region with cells arranged in plural rows and plural columns.[8] No reasonable construction of de Marcken's bar graphs, which the examiner several times acknowledges as a graphical representation of itineraries,[9] could read on the subject matter of claim 32,[10] namely, "… instructions to… display a tabular region having a plurality of cells, … arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options, and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell … ."

The examiner also argues that de Marcken teaches: "… the cells displaying criteria of a set of travel options because cell 376a displays a set of flight segments on airlines that provide travel from the origin to the destination; the list of airport cells (372) displays all the airport names; and the list of airline cells (374) displays all the airline names."[11]

de Marcken does not describe item 376a as a cell, nor would one skilled in this art construe 376a as anything other than a bar representation of an itinerary, in the same manner as that feature is disclosed by de Marcken.[12] Moreover, item 376a does not "display[ing] a

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Appellant contends that the examiner must give patentable weight to all of the features of Claim 32. See *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994) in which the Federal Circuit sets forth guidelines for the Patent Office in evaluating claims directed to data structures. In *Lowry*, the Federal Circuit reversed the Board's application of the so called printed matter doctrine. As in *Lowry*, claim 32 provides: "More than mere abstraction, the data structures are specific electrical or magnetic structural elements in a memory." *Lowry*, 32 F.3d at 1583-1584 and thus here all of the limitations of claim 32 and by analogy the remaining claims must be considered.

[8] "The graphical region (figure 22) displays plurality of cells as (376a), (377a), (377b), (377c), (377d), a list of airport cells (372) and a list airline cells (374). DeMarcken also teaches the plurality of cells being arranged in plural columns and rows. It is clearly that these cells (376a), (377a), (377b), (377c), (377d), a list of airport cells (372) and a list airline cells (374) are arranged in plural columns and rows at the graphical region (figure 22)." Examiner's Answer page 18.

[9] de Marcken's bar graphs depict itineraries with fares and are more correctly considered pricing solutions or travel options.

[10] Appellant chose to argue claim 32 from this group of claims. The examiner is not entitled to shift this election. In any event, claim 1 directed to a graphical user interface recites *inter alia* the functional feature of "the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell."

[11] Examiner's Answer page 18.

summary of a criterion of a set of travel options, with the cells being controls that when selected provides a subset of the travel options that correspond to the respective criterion or criteria of the selected cell." No criterion of a set of travel options is associated with item 376a and item 376a is only a representation of a single travel option. Item 376a does not display a summary of a criterion of a set of travel options.

The examiner also argues that: "DeMarcken further teaches cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell and a second region that displays aspects of the subset of the travel options resulting from selecting the respective cell in the tabular region."[13]

de Marcken does not teach any functionality in which the cells (that the examiner identifies as 376a) when selected provide a subset of the travel options corresponding to the … selected cell. Indeed, 376a corresponds to one travel option, not to a subset of travel options, nor does 376a present a summary of a criterion of the subset of travel options. Therefore, the cell that the examiner refers to in this portion of the examiner's argument must be something other than 376a, but Appellant is at a loss to understand what element in de Marcken the examiner refers to.

Accordingly, for the reasons of record and as discussed above, Claims 1, 6, 32, 33 and 35-39 are neither described nor suggested by de Marcken.

<u>Claims 2 and 5</u>

In answer to Appellant's argument regarding claims 2 and 5, the examiner argues that: "… The interior cell JFK (376a) that intersects one column (pricing column $1433) and one row (time column from midnight to 4:00pm) (figure 22) that meets a pair of criteria."

Claims 2 and 5 recite the feature of: "… interior cells that intersect at least one column and at least one row displaying a value that summarizes travel options that meet a pair of criteria according to the criterion in a respective one of the columns and the criterion in a respective one of the rows … ." de Marcken fails to describe or suggest interior cells by the item 376a, since 376a is not a cell, as used in the claims, nor does 376a intersect a column and a row.

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[12] de Marcken col. 58 Line 61.
[13] Examiner's Answer page 19.

de Marcken does not show columns or rows, as claimed in base claim 1. Rather, as clearly described by de Marcken, item 376a is a set of entries that corresponds to a single pricing solution (set of flights and a total fare). Item 376a, as disclosed by de Marcken, also does not meet the limitation of "displaying a value that summarizes travel options that meet a pair of criteria."

Claims 3 and 4

The examiner did not answer the arguments raised in Appellant's Brief for these claims specifically. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 8

Claim 8 is directed to a tabbed table. The examiner argues that: "... Airport tab is disclosed as cell 372 and airline tab is disclosed as cell 374." However, de Marcken fails to describe or suggest the structure of a tabbed table, as that phrase would be understood by one skilled in the art. Items 372 and 374 of de Marcken are neither cells, nor tabs of a tabbed table.

Indeed, de Marcken discloses a bar graph not a table, as the examiner admits repeatedly throughout her answer.[14] Appellant refers to the Board to Appellant's Appeal Brief[15] where Appellant clearly contrasts tabs of a tabbed table from the features 372 and 374, which are described by de Marcken as controls that filter pricing options in the bar graph according to airports and airlines, respectively.

Thus, while de Marcken's controls 372 and 374 can filter the bar graph according to airlines and airports, they do not have the structure of a tabbed table, nor do controls 372 and 374 structure the display of data as a tab of a tabbed table.

Claims 10, 11, 14, 15, 28 and 31

The examiner argues that: "DeMarcken teaches compartmentalizing travel options into bins according to a set of criteria of the travel options and displaying a summary of the travel

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[14] See for instance, pages 11, 12, 17, 18, and 19.
[15] See for instance pages 17 and 18 of Appellant's Appeal Brief

options in a graphical user interface according to the bins. The bins are disclosed at figure 22 such as 376a, 377a, 377b, 377c, 377d."

Claim 10 is directed to a method including: "compartmentalizing travel options into bins according to a set of criteria of the travel options." The action of compartmentalizing is neither embodied in items 376a, 377a, 377b, 377c, and 377d, of de Marcken, nor are those items the result of any compartmentalizing action disclosed by de Marcken. Rather, items 376a, 377a, 377b, 377c, 377d are graphical representations of flight segments and layovers.

Claims 12 and 29

The examiner argues that: "The bins are disclosed at figure 22 such as 376a, 377a, 377b, 377c, 377d ... being in a two-dimensional table."

One skilled in the art would not view the graphical representations of flight segments and layovers disclosed by de Marcken as teaching: "displaying criteria associated with the bins in a two-dimensional table, with only one criterion assigned to each dimension of the table," as in claim 12.

Claims 13 and 30

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 16

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 17

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 18

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 19

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claims 20, 21 and 25

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claims 22-24

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 26

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 34

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 40

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claim 41-44 and 45-49

The examiner did not specifically answer the arguments raised in Appellant's Brief for these claims. Rather, the examiner relies on the arguments made in Claims 1, 6, 32, 33 and 35-39.

Claims 7 and 9

The examiner argues that: "DeMarcken teaches all the features of the base claims and Ran et al. show the web page in a web browser (see abstract)." Ran et al. neither adds to nor cures the above noted deficiencies in the examiner's argument that applies de Marcken to the claims.
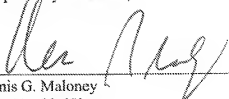
For these reasons, and the reasons stated in the Appeal Brief, Applicant submits that the final rejection should be reversed.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 5/23/07

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